We Claim:

1. A method of treatment or prophylaxis of amyloidosis disorders in a patient the method comprising topically applying to an area of skin of the patient a composition comprising:
   - one or more zinc chelators; and
   - one or more dermal penetration enhancers.

2. A method according to claim 1 wherein the composition further comprises a volatile pharmaceutically acceptable solvent.

3. A method according to claim1 wherein the composition further comprises one or more estrogens.

4. A method according to claim 1 wherein the composition further comprises estradiol.

5. A method according to claim 1 wherein the composition is in a form selected from the group consisting of gels, lotions, sprays compositions and patches.

6. A method according to claim 1 wherein the composition is in the form of a spray composition.

7. A method according to claim 6 wherein the composition is applied by spraying the composition onto the skin of the patient.

8. A method according to claim 1 wherein the composition comprises one or more other components selected from the group consisting of active agents, co-solvents, surfactants, emulsifiers, antioxidants, preservatives, stabilisers, diluents and mixtures of two or more thereof.

9. A composition according to claim1 wherein at least one of a co-solvent and surfactant are present to maintain the zinc chelating agent in solution or suspension at the concentration used.

10. A method according to claim 1 wherein the transdermal administration provides a sustained low dose of zinc chelator for reducing or preventing Aβ deposits.

11. A method according to claim 1 wherein the composition comprises in the range of from about 0.1% to about 10% of a zinc chelator, from about 0.1% to about 10% of a dermal penetration enhancer, and from about 45% to about 99.8% of a volatile solvent.

12. A method according to claim 11 wherein the volatile liquid is selected from the group consisting of ethanol, isopropanol and mixture thereof.

13. A method according to claim 1 wherein the composition comprises 1 to 5% of a zinc chelator, from about 2 to 8% of the dermal penetration enhancer, from about 45 to 90% ethanol, isopropanol or mixture thereof, and from 5 to 45% water.

14. A composition according to claim 11 further comprising a thickening agent.

15. A method according to claim 1 wherein the composition comprises from 0.1 to 2% oestrogen.

16. A method according to claim 1 wherein the zinc chelator has a molecular weight less than 500 Daltons, a melting point less than 200 degrees Celsius, less than or equal to 3 hydrogen bond donors, an octanol-water partition coefficient between 1 and 4 and a water solubility greater than 10 microgram per millilitre.

17. A method according to claim 1 wherein the zinc chelator is selected from phenanthrolines and their derivatives.

18. A method according to claim 1 wherein the zinc chelator has a chemical binding site or sites(s) for a zinc ion as determined by a negative binding energy of greater than 20 kcal/mole for the association of the zinc ion and the compound of interest when using a recognised 3-dimensional molecular modelling software such as "ChemDraw" 3D, version 5.0 running a MM2 force-field for the steric energy calculation.

19. Suitable zinc chelators include, but are not limited to, 3-mercapto-D valine, bis(diethylthiocarbamoyl) disulfide, N,N,N',N'-tetrakis (2-pyridylmethyl)-ethylenediamine,N-(6-methoxy-8-quinolyl)-p-toluenesulfonamide, 8-hydroxy quinoline, 8-hyroxy quinoline-5-sulphonic acid, diethyl dithiocarbamate, phenanthroline and it's derivatives, dipicolinate, diphenylthiocarbazone, dithizone, cimetidine, dipicolinic acid, clioquinol or pharmaceutically acceptable salts or derivatives of any one of the aforementioned.

20. A method according to claim 1 wherein the zinc chelator is selected from the group consisting of diclofenac, ibuprofen, naproxen, piroxicam, indomethacin, ketoprofen, nabumetone, apazone, sulindac, meloxicam, tiaprofenic acid, flurbiprofen, tolfenamic acid, phenylbutazone, benzydamide, aspirin, salicylic acid and pharmaceutically acceptable salts and derivatives thereof.

21. A method according to claim 1 wherein the release rate profile of the chelating agent into the systemic circulation is approaching zero order in nature whereby the potential side effects associated with elevated maximum concentration (C_{max}) to average concentration (C_{avg}) ratios with oral administration are reduced.

22. A method according to claim 1 wherein the method provides a therapeutically effective blood serum level over 12 hours.

23. A method according to claim 1 wherein the dermal penetration enhancer is selected from the group consisting of fatty acids, fatty acid esters, fatty alcohols, glycols and glycol esters, 1,3-dioxolanes and 1,3-dioxanes, macrocyclic ketones containing at least 12 carbon atoms, oxazolidinones and oxazolidinone derivatives, alkyl-2-(N,N-disubstituted amino)-alkanoate esters, (N,N-disubstituted amino)-alkanol alkanoates, sunscreen esters and mixtures thereof.

24. A method according to claim 1 wherein the dermal penetration enhancer is selected from the group consisting of oleic acid, oleyl alcohol, cyclopentadecanone (CPE-218™), sorbitan monooleate, glycerol monooleate, propylene glycol monolaurate, polyethylene glycol monolaurate, 2-n-nonyl 1,3-dioxolane (SEPA™), dodecyl 2-(N,N-dimethylamino)-propionate (DDAIP) or its salt derivatives, 2-ethylhexyl 2-ethylhexanoate, isopropyl myristate, dimethyl isosorbide, 4-decyloxazolidinon-2-one (SR-38™, TCPI, Inc.), 3-methyl-4-decyloxazolidinon-2-one, octyl dimethyl-para-aminobenzoate, octyl para-methoxycinnamate, octyl salicylate and mixtures thereof.

25. A method according to claim 1 wherein the penetration enhancer is selected from safe skin-tolerant ester sunscreens.

26. A method according to claim 24 wherein the safe skin-tolerant ester sunscreens are selected from the group consisting of octyl dimethyl-para-aminobenzoate, octyl para-methoxycinnamate or octyl salicylate.

27. A method according to claim 3 wherein the estrogen is selected from the group consisting of oestradiol, oestriol, oestrone, ethinyloestradiol, mestranol, stilboestrol, dienoestrol, epioestriol, estropipate, zeranol and mixtures thereof.

28. A transdermal composition for the treatment or prophylaxis of amyloidosis disorders in a patient the transdermal composition comprising:

- one or more zinc chelators; and
- one or more dermal penetration enhancers.

29. A transdermal composition according to claim 28 wherein the composition further comprises a volatile pharmaceutically acceptable solvent.

30. A transdermal composition according to claim 28 further comprising one or more estrogens.

31. A transdermal composition according to claim 28 further comprising estradiol.

32. A transdermal composition according to claim 28 in a form selected from the group consisting of gels, lotions, spray compositions and patches.

33. A transdermal composition according to claim 28 in the form of a spray composition.

34. A transdermal composition according to claim 28 comprising one or more other components selected from the group consisting of active agents, co-solvents, surfactants, emulsifiers, antioxidants, preservatives, stabilisers, diluents and mixtures of two or more thereof.

35. A transdermal composition according to claim 28 comprising at least one of a co-solvent and surfactant present in an amount to maintain the zinc chelating agent in solution or suspension at the concentration used.

36. A transdermal composition according to claim 28 wherein the transdermal composition provides a sustained low dose of zinc chelator for reducing or preventing Aβ deposits.

37. A transdermal composition according to claim 28 comprising in the range of from about 0.1% to about 10% of a zinc chelator, from about 0.1% to about 10% of a dermal penetration enhancer, and from about 45% to about 99.8% of a volatile solvent.

38. A transdermal composition according to claim 37 wherein the volatile solvent is selected from the group consisting of ethanol, isopropanol and mixture thereof.

39. A transdermal composition according to claim 28 comprising 1 to 5% of a zinc chelator, from about 2 to 8% of the dermal penetration enhancer, from about 45 to 90% ethanol, isopropanol or mixture thereof, and from 5 to 45% water.

40. A transdermal composition according to claim 39 further comprising a thickening agent.

41. A transdermal composition according to claim 28 further comprising from 0.1 to 2% oestrogen.

42. A transdermal composition according to claim 28 wherein the zinc chelator has a molecular weight less than 500 Daltons, a melting point less than 200 degrees Celsius, less than or equal to 3 hydrogen bond donors, an octanol-water partition coefficient between 1 and 4 and a water solubility greater than 10 microgram per millilitre.

43. A transdermal composition according to claim 28 wherein the zinc chelator is selected from phenanthrolines and their derivatives.

44. A transdermal composition according to claim 28 wherein the zinc chelator has a chemical binding site or sites(s) for a zinc ion as determined by a negative binding energy of greater than 20 kcal/mole for the association of the zinc ion and the compound of interest when using a recognised 3-dimensional molecular modelling software such

as "ChemDraw" 3D, version 5.0 running a MM2 force-field for the steric energy calculation.

45. A transdermal composition according to claim 28 wherein the zinc chelating agent is selected from the group consisting of 3-mercapto-D valine, bis(diethylthiocarbamoyl) disulfide, N,N,N',N'-tetrakis (2-pyridylmethyl)-ethylenediamine,N-(6-methoxy-8-quinolyl)-p-toluenesulfonamide, 8-hydroxy quinoline, 8-hyroxy quinoline-5-sulphonic acid, diethyl dithiocarbamate, phenanthroline and it's derivatives, dipicolinate, diphenylthiocarbazone, dithizone, cimetidine, dipicolinic acid, clioquinol and pharmaceutically acceptable salts and derivatives and mixtures of any one of the aforementioned.

46. A transdermal composition according to claim 28 wherein the zinc chelator is selected from the group consisting of diclofenac, ibuprofen, naproxen, piroxicam, indomethacin, ketoprofen, nabumetone, apazone, sulindac, meloxicam, tiaprofenic acid, flurbiprofen, tolfenamic acid, phenylbutazone, benzydamide, aspirin, salicylic acid and pharmaceutically acceptable salts and derivatives thereof.

47. A transdermal composition according to claim 28 wherein the release rate profile of the chelating agent into the systemic circulation is approaching zero order in nature whereby the potential side effects associated with elevated maximum concentration (C_{max}) to average concentration (C_{avg}) ratios with oral administration are reduced.

48. A transdermal composition according to claim 28 wherein the dermal penetration enhancer is selected from the group consisting of fatty acids, fatty acid esters, fatty alcohols, glycols and glycol esters, 1,3-dioxolanes and 1,3-dioxanes, macrocyclic ketones containing at least 12 carbon atoms, oxazolidinones and oxazolidinone derivatives, alkyl-2-(N,N-disubstituted amino)-alkanoate esters, (N,N-disubstituted amino)-alkanol alkanoates, sunscreen esters and mixtures thereof.

49. A transdermal composition according to claim 28 wherein the dermal penetration enhancer is selected from the group consisting of oleic acid, oleyl alcohol, cyclopentadecanone (CPE-218™), sorbitan monooleate, glycerol monooleate, propylene glycol monolaurate, polyethylene glycol monolaurate, 2-n-nonyl 1,3-dioxolane (SEPA™), dodecyl 2-(N,N-dimethylamino)-propionate (DDAIP) or its salt derivatives, 2-ethylhexyl 2-ethylhexanoate, isopropyl myristate, dimethyl isosorbide, 4-decyloxazolidinon-2-one (SR-38™,TCPI, Inc.), 3-methyl-4- decyloxazolidinon-2-one, octyl dimethyl-para-aminobenzoate, octyl para-methoxycinnamate, octyl salicylate and mixtures thereof.

50. A transdermal composition according to claim 28 wherein the penetration enhancer is selected from safe skin-tolerant ester sunscreens.

51. A transdermal composition according to claim 28 wherein the safe skin-tolerant ester sunscreens are selected from the group consisting of octyl dimethyl-para-aminobenzoate, octyl para-methoxycinnamate or octyl salicylate.

52. A transdermal composition according to claim 31 wherein the estrogen is selected from the group consisting of oestradiol, oestriol, oestrone, ethinyloestradiol, mestranol, stilboestrol, dienoestrol, epioestriol, estropipate, zeranol and mixtures thereof.